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August 22, 2005

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VIA FACSIMILE AND U.S. MAIL

Howard G. Pollack
Fish & Richardson P.C.
500 Arguello Street, Suite 500
Redwood City, CA 94063

Re: Power Integrations v. Fairchild Semiconductor et al. (CA 04-1371 JJF)

Dear Howard:

Pursuant to Paragraph 7 of the Court's February 3, 2005 Rule 16 Scheduling Order, enclosed herewith is Fairchild's proposed constructions for the terms in dispute. To assist the parties to resolve any dispute over the meaning of these terms, Fairchild also provides support for its proposed constructions. This support should not be considered exhaustive, however, and may be supplemented, modified, or amended in Fairchild's expert reports and claim construction briefing as set forth in the Court's Scheduling Order.

Sincerely,


Bas de Blank

cc: William J. Marsden, Jr.

Term	Construction	Support	'075 Claim
MOS transistor	A metal-oxide-semiconductor transistor having the elements set forth in the claim, which excludes a DMOS transistor.	<p>During prosecution, the Examiner repeatedly rejected the pending claims as invalid in light of the Colak Patent (Pat. No. 4,626,879), which showed a prior art DMOS device. To distinguish the Colak Patent and overcome the Examiner's rejections, the patentee repeatedly disclaimed DMOS devices and, instead, expressly limited the '075 Patent to MOS devices:</p> <p>Claim 19 [which issued as claim 1] also provides for a pair of laterally spaced source and drain contact pockets <u>within the substrate</u> as is customary for conventional MOS transistors and is thus, <i>distinguished from DMOS devices</i> which require a higher threshold voltage.</p> <p>(italicized emphasis added).</p> <p>Thus, <i>claim 19 [which issued as claim 1] is limited to a MOS or MOSFET structure, while Colak shows a D-MOS device.</i></p> <p>(italicized emphasis added).</p>	1, 5
substrate	The physical material on which a microcircuit is fabricated.	<p>During prosecution Power Integrations added to the specification of the '075 Patent an explicit definition of the term "substrate":</p> <p>It should be noted that the term 'substrate' refers to the physical material on which a microcircuit is fabricated.</p> <p>'075 Patent, Col. 4, Lines 55-57. The specification of the '075 Patent specifically distinguishes such a "substrate" from well material, which the patent defines as a "secondary substrate":</p> <p>If a transistor is fabricated on a well of n or p type material within a primary substrate of opposite type material, the well material can be considered a secondary substrate.</p> <p>'075 Patent, Col. 4, Lines 57-60.</p>	1
a pair of laterally spaced pockets of semiconductor material of a second conductivity type within the	Two laterally spaced pockets of semiconductor material of the opposite conductivity type from the substrate	<p>During prosecution, to distinguish Colak, Power Integrations expressly stated that the claimed "pair of laterally spaced" pockets is present in MOS devices but not found in DMOS devices. Rather, DMOS devices are fabricated by first diffusing a channel region and then diffusing a source region into the channel diffusion. The drain region, in contrast, is not diffused into the channel region.</p>	1

Term	Construction	Support	'075 Claim
substrate	present within the physical material on which a microcircuit is fabricated. Power Integrations disclaimed reading this element on a DMOS transistors.		
adjoining	To be very near, next to, or touching.	"to be very near, next to, or touching" <i>Cambridge International Dictionary of English</i> .	1
a surface adjoining layer of material of the first conductivity type on top of an intermediate portion of the extended drain region between the drain contact pocket and the surface-adjoining positions	A layer of material of the same conductivity as the substrate above a portion of the extended drain region and between the drain contact pocket and each of the surface adjoining positions of the extended drain region. Power Integrations disclaimed reading this element on a DMOS transistor.	During prosecution, and to distinguish Colak, Power Integrations expressly stated: Thus, the top layer and the substrate act as gates for controlling current flow through the extended drain region between the surface adjoining positions and the drain contact pocket. <i>This structure can be considered a double-sided, junction-gate field-effect transistor (JFET).</i> (italicized emphasis added). Claim 19 [which issued as claim 1] is directed to the structural combination of a <i>double-sided</i> JFET and a MOSFET.... Thus, claim 19 is patentably distinct over Colak. (italicized emphasis added).	1
said top layer of material	This term lacks antecedent basis and cannot be construed.		1
subject to	Experiencing.	"suffering a particular liability or exposure" <i>Merriam Webster's Collegiate</i>	1

Term	Construction	Support	'075 Claim
reverse-bias	A bias voltage applied to a diode or a semiconductor junction with polarity that permits little or no current to flow.	<i>Dictionary</i> , 10th ed., 1994. "a bias voltage applied to a diode or a semiconductor junction with polarity that permits little or no current to flow. It is the opposite of forward bias." <i>McGraw-Hill Electronics Dictionary</i> , 6th Ed. 1997.	1
insulating layer on the surface of the substrate and covering at least that portion between the source contact pocket and the nearest surface-adjointing position of the extended drain region	A non-conductive layer on the surface of the physical material on which a microcircuit is fabricated between the source contact pocket and the nearest surface-adjointing position of the extended drain region. Power Integrations disclaimed reading this element on a DMOS transistor.	During prosecution to distinguish the prior art, Power Integrations expressly stated that the claimed "insulating layer on the surface of the substrate and covering at least that portion between the source contact pocket and the nearest surface-adjointing position of the extended drain region" limits the claims to a "MOS or MOSFET structure" and precludes DMOS devices. As set forth above, the claimed "substrate" refers to the "the physical material on which the microcircuit is fabricated" and does not include "well material" (which the '075 Patent defines to as a "secondary substrate").	1
gate electrode on the insulating layer and electrically isolated from the substrate region thereunder which forms a channel laterally between the source	A gate electrode on the insulating layer electrically isolated from the physical material on which a microcircuit is fabricated, which physical material (and not well material) forms	As set forth above, during prosecution to distinguish the prior art Power Integrations expressly stated that the claimed "gate electrode on the insulating layer and electrically isolated from the substrate region thereunder which forms a channel laterally between the source contact pocket and the nearest surface-adjointing position of the extended drain region" limits the claims to a "MOS or MOSFET structure" and precludes DMOS devices.	1

Term	Construction	Support	'075 Claim
contact pocket and the nearest surface-adjointing position of the extended drain region	lateral channel between the source contact pocket and the nearest surface-adjointing position of the extended drain region. Power Integrations disclaimed reading this element on a DMOS transistor.		
substrate region thereunder which forms a channel	A channel is formed laterally in the substrate between the source contact pocket and the nearest surface-adjointing position of the extended drain region. Power Integrations disclaimed reading this element on a DMOS transistor.	As set forth above, during prosecution to distinguish the prior art Power Integrations expressly stated that the claimed "gate electrode on the insulating layer and electrically isolated from the substrate region thereunder which forms a channel laterally between the source contact pocket and the nearest surface-adjointing position of the extended drain region" limits the claims to a "MOS or MOSFET structure" and precludes DMOS devices.	1
being subject to application of a reverse-bias voltage	A bias voltage applied to a diode or a semiconductor junction with polarity that permits little or no current to flow.	"a bias voltage applied to a diode or a semiconductor junction with polarity that permits little or no current to flow. It is the opposite of forward bias." <i>McGraw-Hill Electronics Dictionary</i> , 6th Ed. 1997.	1

Term	Construction	Support	'366 Claim	'851 Claim	'876 Claim
frequency jittering	A small and uncontrolled variation in the frequency of a signal around a primary frequency, i.e., noise.	<p>"The jittering operation of the embodiment of FIG. 1 is further illustrated in a chart in FIG. 2. A normalized operating frequency is plotted on the y-axis while the counting cycle as shown by the counter outputs Q 4-Q 7 is plotted on the x-axis. As shown in FIG. 2, as the counter counts upward to the maximum count of 128, the peak switching frequency is achieved. This peak switching frequency is normalized to be about 1.075 times the base switching frequency. Further, on average, the switching frequency is between 1.03 and 1.04 times the base switching frequency. Thus, the embodiment of FIG. 1 deviates the switching frequency of the oscillator within a narrow range. This deviation reduces EMI noise by spreading the energy over a wider frequency range than the bandwidth measured by the EMI test equipment such that the noise measured by the EMI test equipment is reduced considerably." '876 Patent, 5:57-6:5.</p> <p>"As discussed above, the switching frequency of the primary oscillator 110 is determined by the amount of current the primary oscillator uses to charge and discharge capacitor 134. The low frequency oscillator 405 varies this current within a narrow range to jitter the frequency of the primary oscillator 110." '876 Patent, 6:17-22.</p> <p>"small, rapid variations in a waveform due to mechanical vibrations, fluctuations in supply voltages, control-system instability, and other causes." <i>McGraw-Hill Dictionary of Scientific and Technical Terms</i>, 3rd Ed. 1984.</p>			1
oscillator	A circuit that provides a periodic signal.	"A circuit that generates alternating current at a frequency determined by the value of its components." <i>McGraw-Hill Electronics Dictionary</i> , 6th Ed. 1997.	1, 2, 10, 16	1, 2, 11	1
switching frequency	This term is indefinite and cannot be construed.				1, 17
digital to analog	A converter in	"A converter in which digital input signals are changed to			1

Term	Construction	Support	'366 Claim	'851 Claim	'876 Claim
converter	which digital input signals are changed to essentially proportional analog signals.	essentially proportional analog signals." <i>McGraw-Hill Dictionary of Scientific and Technical Terms</i> , 3rd Ed. 1984.			
coupled	A direct connection or a connection through intermediate circuits so that energy can transfer electrically or magnetically from one to another	coupled circuits is "two or more electric circuits so arranged that energy can transfer electrically or magnetically from one to another." <i>McGraw-Hill Dictionary of Scientific and Technical Terms</i> , 3rd Ed. 1984.	8, 18	9, 11, 17	1
counter	A device that counts, i.e., increments or decrements.	"(B) an instrument for storing integers, permitting these integers to be increased or decreased sequentially by unity or by an arbitrary integer and capable of being reset to zero or to an arbitrary integer" <i>The New IEEE Standard Dictionary of Electrical and Electronic Terms</i> , 1993.			1, 18
primary voltage	The voltage generated by the primary voltage source.	"The means for varying the frequency may include one or more voltage sources connected to the control input; and a counter connected to the output of the oscillator and to the one or more voltage sources. The oscillator may include a primary voltage source connected to the control input; and a differential switch connected to the primary voltage source." '876 Patent, 3:10-15. See also '876 prosecution history, including 10/16/00 office action.			17, 19
cycling	A periodic change of the controlled variable.	See '876 Patent, 5:36-55. "A periodic change of the controlled variable from one value to another in an automatic control system. Also called oscillation." <i>McGraw-Hill Electronics Dictionary</i> , 6th Ed. 1997.			17
secondary	Additional voltage	See '876 Patent, 3:10-15 and '876 prosecution history, including			17, 19

Term	Construction	Support	'366 Claim	'851 Claim	'876 Claim
voltage sources	sources distinct from the primary voltage source.	10/16/00 office action.			
secondary voltage	A voltage generated by the secondary voltage sources.	See '876 Patent, 3:10-15 and '876 prosecution history, including 10/16/00 office action.			17
combining	Adding together from two or more different sources.	During prosecution of the '876 Patent, PI stated that "In contrast, Albach fails to disclose teach or suggest <i>combining</i> a secondary current with a primary current <i>to be received at</i> a control input of an oscillator. Instead, Albach suggests a reference voltage Uref that is received at a positive input of a comparator 31 and a voltage U1 that varies over time that is received at a negative input of comparator 31. Albach fails to disclose teach or suggest that U1 is combined with Uref and is received at a control input U2 of VCO 34. Indeed, Albach fails to disclose teach or suggest that Uref and U1 are added together to form U2."			17
voltage-controlled oscillator	A circuit that provides a signal whose period is controlled by a voltage.	"A circuit that generates alternating current at a frequency determined by the value of its components." <i>McGraw-Hill Electronics Dictionary</i> , 6th Ed. 1997.			17, 18, 19
supplemental voltage	A voltage other than the primary or secondary voltages.	See '876 Patent, 3:10-15 and '876 prosecution history, including 10/16/00 office action.			19
switch	A device for making, breaking, or changing the connections in an electric circuit.	"A device for making, breaking, or changing the connections in an electric circuit." <i>The New IEEE Standard Dictionary of Electrical and Electronic Terms</i> , 1993.	1, 2, 9	1, 2, 9, 11, 16, 17	
on-state	High state of a signal.	"When the output of pulse width modulation comparator 609 is high or-gate 425 is triggered to go high, which in turn resets pulse width modulation latch 430, removing the on signal from the control input switch 435, thereby turning off switch 435. Pulse	1, 10		

Term	Construction	Support	'366 Claim	'851 Claim	'876 Claim
		width modulation latch 430 is set by clock signal 603, which is provided at the beginning of each cycle of pulse width modulation oscillator 480. Drive circuit 615, which is presently preferred to be an and-gate, receives the output of pulse width modulation latch 430, power up signal 420, and maximum duty cycle signal 607. As long as each one of the signals is high, drive signal 610 is provided to the gate of MOSFET 435, which is coupled between first terminal 300 and second terminal 305 of the pulse width modulated switch 262. When any of the output of pulse width modulation latch 430, power up signal 420, or maximum duty cycle signal 607 goes low drive signal 610 is no longer provided and switch 435 ceases conduction." '366 Patent, 8:64-9:13.			
off-state	Low state of a signal.	"When the output of pulse width modulation comparator 609 is high or-gate 425 is triggered to go high, which in turn resets pulse width modulation latch 430, removing the on signal from the control input switch 435, thereby turning off switch 435. Pulse width modulation latch 430 is set by clock signal 603, which is provided at the beginning of each cycle of pulse width modulation oscillator 480. Drive circuit 615, which is presently preferred to be an and-gate, receives the output of pulse width modulation latch 430, power up signal 420, and maximum duty cycle signal 607. As long as each one of the signals is high, drive signal 610 is provided to the gate of MOSFET 435, which is coupled between first terminal 300 and second terminal 305 of the pulse width modulated switch 262. When any of the output of pulse width modulation latch 430, power up signal 420, or maximum duty cycle signal 607 goes low drive signal 610 is no longer provided and switch 435 ceases conduction." '366 Patent, 8:64-9:13.	1		
said maximum duty cycle	This term lacks antecedent basis and cannot be construed.		1		
maximum duty cycle signal	No construction necessary.	This term does not need to be construed. According to the specification, this is a signal with a high (on) state and a low (off)	1, 10	1, 11	

Term	Construction	Support	'366 Claim	'851 Claim	'876 Claim
soft start circuit that provides a signal instructing said drive circuit to disable said drive signal during at least a portion of said on-state of said maximum duty cycle	A structure that provides the functionality of providing a signal instructing said drive circuit to disable said drive signal during at least a portion of said on-state of said maximum duty cycle. This means-function element is limited to the structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1, including capacitor 110 and (ii) the soft start block and low frequency oscillator shown in Figures 3, 6, and 9.	state, which is what is required by the claim language. See '366 Patent, 8:64-9:13. "Soft start functionality is termed to be a functionality that reduces the inrush currents at start up." '366 Patent, 2:58-3:8; <i>see also</i> 7:9-18 and Figures 1, 3, 6, and 9.	1, 2		
a soft start circuit that provides a signal instructing said drive circuit	A structure that provides the functionality of providing a signal	"Soft start functionality is termed to be a functionality that reduces the inrush currents at start up." '366 Patent, 2:58-3:8; <i>see also</i> 7:9-18 and Figures 1, 3, 6, and 9.		13	

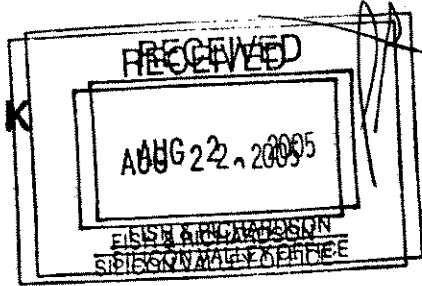
Term	Construction	Support	'366 Claim	'851 Claim	'876 Claim
to discontinue said drive signal according to a magnitude of said frequency variation signal	instructing said drive circuit to discontinue said drive signal according to a magnitude of said frequency variation signal. This means-plus-function element is limited to the structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1, including capacitor 110 and (ii) the soft start block and low frequency oscillator shown in Figures 3, 6, and 9.				
a soft start circuit that provides a signal instructing said drive circuit to disable said drive signal during at least a portion of said maximum time period	A structure that provides the functionality of providing a signal instructing said drive circuit to disable said drive signal during at least a portion of said maximum time	"Soft start functionality is termed to be a functionality that reduces the inrush currents at start up." '366 Patent, 2:58-3:8, <i>see also</i> 7:9-18 and Figures 1, 3, 6, and 9.	9, 16		

Term	Construction	Support	'366 Claim	'851 Claim	'876 Claim
	<p>period. This means-plus-function element is limited to the structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1, including capacitor 110 and (ii) the soft start block and low frequency oscillator shown in Figures 3, 6, and 9.</p>				
<p>a soft start circuit that provides a signal instructing said drive circuit to discontinue said drive signal when said magnitude of said oscillation signal is greater than a magnitude of said frequency variation signal</p>	<p>A structure that provides the functionality of providing a signal instructing said drive circuit to discontinue said drive signal when said magnitude of said oscillation signal is greater than a magnitude of said frequency variation signal. This means-plus-function element is limited to the</p>	<p>"Soft start functionality is termed to be a functionality that reduces the inrush currents at start up." '366 Patent, 2:58-3:8; <i>see also</i> 7:9-18 and Figures 1, 3, 6, and 9.</p>		4	

Term	Construction	Support	'366 Claim	'851 Claim	'876 Claim
	structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1, including capacitor 110 and (ii) the soft start block and low frequency oscillator shown in Figures 3, 6, and 9.				
monolithic device	A device constructed from a single crystal or other single piece of material.	Monolithic: "Constructed from a single crystal or other single piece of material." <i>McGraw-Hill Dictionary of Scientific and Technical Terms</i> , 3rd Ed. 1984. Monolithic: "Constructed from a single crystal or other single piece of material." <i>McGraw-Hill Electronics Dictionary</i> , 6th Ed. 1997. Monolithic circuit: "An alternate term for an <i>integrated circuit</i> (IC). A circuit fabricated on a single chip of semiconductor material." <i>McGraw-Hill Electronics Dictionary</i> , 6th Ed. 1997.	2, 16	2, 16	
frequency variation circuit that provides a frequency variation signal	A structure that provides the functionality of providing a signal that is used to modulate or change the frequency at which the switch is operated. This means-plus-function element is	"The frequency variation signal 400 is provided by frequency variation circuit 405, which preferably comprises an oscillator that operates at a lower frequency than main oscillator 465." '366 Patent, 6:37-40; <i>see also</i> Figure 3.	14	1, 2, 11, 16	

Term	Construction	Support	'366 Claim	'851 Claim	'876 Claim
	limited to the structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1 including resistor 140 and current 135 and (ii) the frequency variation block and low frequency oscillator shown in Figures 3, 6, and 9.				
Maximum duty cycle signal comprising an on-state and an off-state	A signal with a high (on) state and a low (off) state.	<p>"When the output of pulse width modulation comparator 609 is high or-gate 425 is triggered to go high, which in turn resets pulse width modulation latch 430, removing the on signal from the control input switch 435, thereby turning off switch 435. Pulse width modulation latch 430 is set by clock signal 603, which is provided at the beginning of each cycle of pulse width modulation oscillator 480. Drive circuit 615, which is presently preferred to be an and-gate, receives the output of pulse width modulation latch 430, power up signal 420, and maximum duty cycle signal 607. As long as each one of the signals is high, drive signal 610 is provided to the gate of MOSFET 435, which is coupled between first terminal 300 and second terminal 305 of the pulse width modulated switch 262. When any of the output of pulse width modulation latch 430, power up signal 420, or maximum duty cycle signal 607 goes low drive signal 610 is no longer provided and switch 435 ceases conduction." '366 Patent, 8:64-9:13.</p>	1, 10		
Soft start circuit	A structure that provides the	"Soft start functionality is termed to be a functionality that reduces the inrush currents at start up." '366 Patent, 2:58-3:8; see <i>also</i>			

Term	Construction	Support	'366 Claim	'851 Claim	'876 Claim
	<p>functionality of providing a signal instructing said drive circuit to disable said drive signal during at least a portion of said on-state of said maximum duty cycle. This means-plus-function element is limited to the structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1, including capacitor 110 and (ii) the soft start block and low frequency oscillator shown in Figures 3, 6, and 9.</p>	<p>7:9-18 and Figures 1, 3, 6, and 9.</p>			



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William J. Marsden, Jr.

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RE *Power Integrations v. Fairchild Semiconductor et al*

MESSAGE

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C-M-A 10414-25/7584

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October 18, 2005

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VIA FACSIMILE

Michael Headley
Fish & Richardson P.C.
500 Arguello Street
Suite 500
Redwood City, CA 94036

Re: Power Integrations v. Fairchild Semiconductor et al. (CA 04-1371 JJF)

Dear Michael:

Enclosed is my summary of the parties' proposed claim constructions, as informed by our meet and confer efforts. While I have striven to capture each parties' present position, given the number of discussions and the continued evolution of the constructions, please review the charts and let me know if you have any questions or corrections.

Sincerely,

Bas de Blank

cc: William J. Marsden, Jr.
Howard G. Pollack

Encl.

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003/008

Term	Fairchild's Definition	Power Integrations' Definition	Page
MOS transistor	A metal-oxide-semiconductor transistor having the elements set forth in the claim, which excludes a DMOS transistor.	A MOS transistor is a metal-oxide-semiconductor device that can control the flow of current between a source terminal and a drain terminal. In common usage in the industry, "high voltage" generally refers to a device that can operate at 50V and above. Power Integrations disagrees with Fairchild that this term, or this claim, excludes all application to devices that may be referred to as "DMOS" transistors.	1, 5
substrate	The physical material on which a transistor is fabricated.	A substrate as expressly defined in the '075 patent is the physical material on which a microcircuit is fabricated and may include subsequently formed or doped regions which are expressly provided for in the patent and referred to as a "secondary substrate" such as a well or epitaxial layer.	1
a pair of laterally spaced pockets of semiconductor material of a second conductivity type within the substrate	Two laterally spaced pockets of semiconductor material of the opposite conductivity type from the substrate present within the physical material on which a microcircuit is fabricated. Power Integrations disclaimed reading this element on a DMOS transistors.	"[P]air of laterally spaced pockets of semiconductor material of a second conductivity type" should be given its plain, English language meaning. "Within the substrate" refers to anywhere within the boundaries of the substrate. Such a pocket can be within a well region and still be "within the substrate" as recited in the claim. Power Integrations disagrees with Fairchild that this phrase, or this claim, excludes all application to devices that may be referred to as "DMOS" transistors.	1
adjoining	To be very near, next to, or touching.	To be very near, next to, or touching.	1
a surface adjoining layer of material of the first conductivity type on top of an intermediate portion of the extended drain	A layer of material of the same conductivity as the substrate above a portion of the extended drain region and between the drain contact pocket and each of the surface adjoining positions of the extended drain region. Power	A layer of material of the same conductivity type as the substrate located on top of a portion of the extended drain region between the drain contact pocket and surface adjoining positions of the extended drain region. Power Integrations disagrees with Fairchild that this	1

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004/009

Term	Fairchild's Construction	Power Integrations' Construction	Comments
region between the drain contact pocket and the surface-adjointing positions	Integrations disclaimed reading this element on a DMOS transistor.	phrase, or this claim, excludes all application to devices that may be referred to as "DMOS" transistors.	
said top layer of material	This term lacks antecedent basis and cannot be construed.	The top layer of material in this limitation refers to the surface adjoining layer.	1
substrate region thereunder which forms a channel	A channel is formed laterally in the substrate between the source contact pocket and the nearest surface-adjointing position of the extended drain region. Power Integrations disclaimed reading this element on a DMOS transistor.	This phrase should be afforded its plain meaning and simply refers to the physical location of the "channel" being formed underneath the gate region. Nothing in the patent precludes the channel from being formed in "well" material or otherwise doped material beneath the insulated gate. Power Integrations disagrees with Fairchild that this phrase, or this claim, excludes all application to devices that may be referred to as "DMOS" transistors.	1
being subject to application of a reverse-bias voltage	Experiencing a bias voltage applied to a semiconductor junction with polarity that permits little or no current to flow.	Reverse-bias in this context is a voltage applied across a rectifying junction with a polarity that provides a high-resistance path. It means that the surface adjoining layer of material recited in the claims is connected in some way to the substrate or "ground" potential.	1

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005/009

Term	Proposed Construction	Alternative Construction	Claim	Page	Page
frequency jittering	Frequency jitter is an intentional modulation or variation in the frequency of a signal.	Frequency jitter in the context of the patent is a controlled and predetermined change or variation in the frequency of a signal.			1
coupled	Two circuits are coupled when they are configured such that signals pass from one to the other	Two circuits are coupled when they are connected such that voltage, current, or control signals pass from one to the other.	8, 18	9, 11, 17	1
primary voltage	The voltage generated by the primary voltage source.	A primary voltage is a base or initial voltage. Nothing in the patent limits this term to a voltage generated solely by a "primary voltage source."			17, 19
cycling	A periodic change of the controlled variable.	Cycling is repeating a sequence or a pattern			17
secondary voltage sources	Additional voltage sources distinct from the primary voltage source.	A voltage source is a source, i.e. a place of procurement or a supply, of voltage and may include, for example, a resistor having a substantially constant current flowing through it. A secondary voltage source is a source for a secondary voltage. Nothing in the claims or specification requires the secondary voltage source be independent from the source of the primary voltage.			17, 19
secondary voltage	A voltage generated by the secondary voltage sources.	Plain meaning: secondary voltage is a subsequent or additional voltage.			17
combining	Adding together from two or more different sources.	Combining means adding together. There is nothing that requires the "different sources" added limitation of Fairchild's proposed construction.			17

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006/009

Term	Definition	Construction	Page	Page	Page
supplemental voltage	A voltage other than the primary or secondary voltages.	A voltage in addition to the primary voltage. Nothing in the intrinsic evidence suggests that a "supplemental voltage" is different from the "secondary" voltage.			19
on-state	One of two possible states, not the off state	See above re maximum duty cycle signal.	1, 10		
off-state	The other of two possible states, not the on state	See above re maximum duty cycle signal.	1		
said maximum duty cycle	This term lacks antecedent basis and cannot be construed.	This limitation clearly has a typographical error in that the term "signal" was inadvertently left off the end of the clause "maximum duty cycle". Because the intent is clear, there is nothing ambiguous in the claim, and the intended term "said maximum duty cycle signal" does not lack any antecedent basis. See above re maximum duty cycle signal.	1		
maximum duty cycle signal	No construction necessary.	See above re said maximum duty cycle.	1, 10	1, 11	
soft start circuit that provides a signal instructing said drive circuit to disable said drive signal during at least a portion of said on-state of said maximum duty cycle	A structure that provides the functionality of providing a signal instructing said drive circuit to disable said drive signal during at least a portion of said on-state of said maximum duty cycle. This means-plus-function element is limited to the structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1, including capacitor 110, (ii) the soft start block and low frequency oscillator shown in Figures 3, 6, and 9, and (iii) the corresponding portions of the specification	The functionality should be construed in accordance with the plain meaning of its terms. The corresponding structure is the same as set forth above.	1, 2		

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	describing these structures.				
a soft start circuit that provides a signal instructing said drive circuit to discontinue said drive signal according to a magnitude of said frequency variation signal	A structure that provides the functionality of providing a signal instructing said drive circuit to discontinue said drive signal according to a magnitude of said frequency variation signal. This means-plus-function element is limited to the structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1, including capacitor 110, (ii) the soft start block and low frequency oscillator shown in Figures 3, 6, and 9, and (iii) the corresponding portions of the specification describing these structures.	The functionality should be construed in accordance with the plain meaning of its terms. The corresponding structure is the same as set forth above re soft start circuit.		13	
a soft start circuit that provides a signal instructing said drive circuit to disable said drive signal during at least a portion of said maximum time period	A structure that provides the functionality of providing a signal instructing said drive circuit to disable said drive signal during at least a portion of said maximum time period. This means-plus-function element is limited to the structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1, including capacitor 110, (ii) the soft start block and low frequency oscillator shown in Figures 3, 6, and 9, and (iii) the corresponding portions of the specification describing these structures.	The functionality should be construed in accordance with the plain meaning of its terms. The corresponding structure is the same as set forth above re soft start circuit.	9, 16		
a soft start circuit that provides a signal instructing said drive	A structure that provides the functionality of providing a signal instructing said drive circuit to discontinue said drive signal when said magnitude of said oscillation	The functionality should be construed in accordance with the plain meaning of its terms. The corresponding structure is the same as set forth		4	

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Term	Claimed Construction	Definition	Col. 1	Col. 2	Col. 3
circuit to discontinue said drive signal when said magnitude of said oscillation signal is greater than a magnitude of said frequency variation signal	signal is greater than a magnitude of said frequency variation signal. This means-plus-function element is limited to the structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1, including capacitor 110, (ii) the soft start block and low frequency oscillator shown in Figures 3, 6, and 9, and (iii) the corresponding portions of the specification describing these structures.	above re soft start circuit.			
monolithic device	A device constructed from a single crystal or other single piece of material.	A device constructed from a single crystal or other single piece of material.	2, 16	2, 16	
frequency variation circuit that provides a frequency variation signal	A structure that provides the functionality of providing a signal that is used to modulate or change the frequency at which the switch is operated. This means-plus-function element is limited to the structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1 including resistor 140 and current 135, (ii) the frequency variation block and low frequency oscillator shown in Figures 3, 6, and 9, and (iii) the corresponding portions of the specification describing these structures.	A frequency variation circuit is a structure that provides the "frequency variation signal". A frequency variation signal is an internal signal that cyclically varies in magnitude during a fixed period of time and is used to modulate the frequency of the oscillation signal within a predetermined frequency range.	14	1, 2, 11, 16	
Maximum duty cycle signal comprising an on-state and an off-state	A signal with an on state and an off state.	A maximum duty cycle signal is a signal the purpose of which is to limit the maximum "on-time" of a power switch during an on/off switching cycle. The on-state is the state of the	1, 10		

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Claim	Prior art	Proposed amendment	Priority	Citations	Comments
		maximum duty cycle signal that allows the switch to be active or "on" and is independent of the logic state of the signal itself. Correspondingly, the off-state is the maximum duty cycle signal that results in the switch being placed or held in its inactive or "off" condition and, again, is independent of logic state.			
Soft start circuit	A structure that provides the functionality of providing a signal instructing said drive circuit to disable said drive signal during at least a portion of said on-state of said maximum duty cycle. This means-plus-function element is limited to the structure disclosed in the '366 and '851 patents, and equivalents thereof. The only such structures disclosed are (i) the circuit shown in Figure 1, including capacitor 110, (ii) the soft start block and low frequency oscillator shown in Figures 3, 6, and 9, and (iii) the corresponding portions of the specification describing these structures.	Soft start circuit should be construed according to 35 U.S.C. § 112 ¶ 6 to include the circuit structures disclosed in the specification for performing the recited functions, and equivalents thereof. The corresponding structures for the "soft start circuit" are disclosed in the specification of the '851 patent at: Col. 5, line 66 – Col. 6, line 9; Col. 6, lines 39-Col. 7, line 8; Col. 11, line 64-Col. 12, line 2. The specification expressly excludes from the definition of "soft start circuit" prior art circuits using an external "soft start capacitor." See Col. 2, line 58-Col. 3, line 8.	1, 2, 9, 16	4, 13	

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